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U.S. Patent Application No. 09/936,333 Attorney Ref. No.: 082137-0280655

Amendment of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-14. (Canceled)

- 15. (Currently amended) A murine monoclonal antibody or immunologically reactive fragment thereof which recognizes and binds to a protein complex comprising a two-chain form of matriptase, wherein said antibody is selected from the group consisting of M32, M69, and M19 M69 and M123.
- 16. (Previously presented) An isolated antibody or immunologically reactive fragment thereof which selectively binds with greater affinity to a two-chain (active) form of matriptase of a human than to a single-chain (zymogen) form of matriptase of said human.
 - 17. (Canceled)
- 18. (Previously presented) The antibody or immunologically reactive fragment thereof of claim 16, wherein the antibody is a monoclonal antibody.
- 19. (Previously presented) The antibody or immunologically reactive fragment thereof of claim 15, wherein the immunologically reactive fragment is selected from the group consisting of scFv, Fab, Fab', and F(ab')₂.

20-33. (Canceled)

- 34. (Previously presented) The antibody or immunologically reactive fragment thereof of claim 16, wherein the immunologically reactive fragment is selected from the group consisting of scFv, Fab, Fab', and F(ab')₂.
- 35. (Previously presented) The antibody or immunologically reactive fragment thereof of claim 16, wherein said single-chain form of matriptase comprises a polypeptide encoded by the nucleotide sequence of SEQ ID NO: 4, and the two-chain form of matriptase is produced by cleavage of said single-chain form of matriptase.

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36. (Currently amended) The antibody or immunologically reactive fragment thereof of claim 16, which binds to the two-chain (active) form of a matriptase protein that is present in a complex comprising a Kunitz type serine protease inhibitor Hepatocyte growth factor activator inhibitor-1 (HAI-1) or a fragment thereof.